Claims:

1. An electronic access control system for application to a lock mechanism comprising a lock and one or more keys for operating said lock, said electronic access control system comprising first memory means disposed in or on said one or more keys, identification data which is unique to a respective key being stored in a non-changeable, non-deletable manner in said first memory means, the electronic access control system further comprising second memory means and processing means disposed in or on said lock for storing data representative of one or more keys authorised to operate said lock, for reading the identification data stored in or on a key which is applied to or inserted into said lock, and for causing said lock to operate only if the read identification data relates to a key authorised to operate said lock.

2. An electronic access control system according to claim 1, wherein the one or more keys authorised to operate said lock are selected from a pool of keys, each of which is provided with unique identification data.

3. An electronic access control system according to claim 1 or claim 2, wherein identification data representative of a key authorised to operate said lock may be read from said first memory means and stored in said second memory means when said key is applied to or inserted into said lock.

4. An electronic access control system according to claim 3, wherein said second memory means and processing means are arranged to operate in at least two selectable modes, an edit mode and a normal mode, wherein in said edit mode, identification data can be added to or deleted from said second memory means, and in said normal mode, said lock can be operated by said one or more authorised keys.

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5. An electronic access control system according to claim 4, wherein one key of a set of keys associated with a particular lock is defined in said second memory means and processing means as an 'edit key', said edit key being arranged to cause said second memory means and processing means to operate in said edit mode.

6. An electronic access control system according to claim 5, wherein said edit key causes said second memory means and processing means to enter said edit mode upon application or insertion thereof to said lock.

7. An electronic access control system according to claim 5 or claim 6, wherein said edit key is not configured to operate said lock.

8. An electronic access control system according to any one of claims 5 to 7, wherein all identification data stored in said second memory means can be deleted by application or insertion of said edit key to said lock for a predetermined period of time.

9. An electronic access control system according to any one of claims 5 to 8, wherein in said edit mode, identification data associated with one or more keys authorised to operate said lock can be added to or deleted from said second memory means by application or insertion to said lock of said respective one or more keys, and/or wherein in said edit mode, identification data associated with one or more keys authorised to operate said lock can be added to or deleted from said second memory means by application or insertion to said lock of said edit key..

10. An electronic access control system according to claim 9, wherein in said edit mode, if a key whose identification data is not stored in said second memory means is applied or inserted into said lock, said identification data is read and stored in said second memory means, and if a key whose identification data is stored in said second memory means is applied or inserted into said lock, said identification data is deleted from said second memory means.

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11. An electronic access control system according to any one of the preceding claims, wherein said one or more keys is or are each provided with indicator means which is operated when a key applied or inserted into said lock is determined to be authorised to operate said lock.

12. An electronic access control system according to any one of the preceding claims, wherein when it is determined that a key applied or inserted into said lock is authorised to operate said lock, the lock will remain operable for a predetermined period of time only, following which it is arranged to return to its inoperable state.

13. An electronic access control system according to any one of the preceding claims, wherein one or more additional memory means are provided in or on said one or more keys, the or each additional memory means being arranged to store the unique identification data relating to another key.

14. An electronic access control system according to claim 13, comprising a key writing unit for copying the unique identification data relating to a first key (from said first memory means) to an additional memory means in or on a second key, the unique identification data relating to said second key remaining in its respective first memory means.

15. An electronic access control system according to claim 13 or 14, wherein when a key is applied or inserted into said lock, the processing means determines if the unique identification data relating to said key is stored in said second memory means, if so, it causes said lock to operate, if not, it determines if any additional identification data is stored in said one or more additional storage means, if so, it determines if said additional data is stored in said second memory means, and if so, it causes said lock to operate.

16. An electronic access control system substantially as herein described with reference to the accompanying drawings.

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17. A method of providing an electronic access control system for application to a lock mechanism comprising a lock and one or more keys for operating said lock, said method comprising the steps of providing a plurality of keys in or on each of which is stored unique identification data in a non-changeable, non-deletable manner, selecting one or more of said plurality of keys and storing the unique identification data relating to the or each selected key of one or more keys in memory means provided in or on said lock, reading the identification data stored in or on a key which is applied to or inserted into said lock, causing said lock to operate only if the read identification data relates to a key authorised to operate said lock.

18. A method of providing an electronic access control system substantially as herein described with reference to the accompanying drawings.

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